

## CLAIMS:

1. In a disc drive apparatus of a type comprising:
  - radially displaceable scan means, comprising:
    - a sledge radially displaceable with respect to an apparatus frame;
    - a platform radially displaceable with respect to said sledge;
  - a method for detecting a substantial deceleration or acceleration or stop of the sledge when moving radially;
  - the method comprising the step of detecting a radial displacement of said platform with respect to said sledge.
- 10 2. A method according to claim 1, for use in a disc drive apparatus comprising an electromagnetic device in an actuator for displacing said platform with respect to said sledge, the method comprising the step of detecting a back-EMF in said electromagnetic device.
- 15 3. A method according to claim 1 or 2, for use in a disc drive apparatus comprising an optical system for scanning a disc, the optical system defining an optical path of which at least a part is substantially fixed with respect to the sledge and comprising an optical element which is fixed with respect to the platform;  
the method comprising the step of detecting an optical read signal and deriving therefrom an X-displacement signal.
- 20 4. A method according to any of claims 1-3, wherein it is determined that a substantial deceleration or acceleration or stop of the sledge occurs when a detected radial displacement of said platform with respect to said sledge exceeds a predetermined decision threshold.
- 25 5. A method according to claim 2 or 3, wherein an actuator is activated such as to counteract a radial displacement of said platform with respect to said sledge;  
the method comprising the step of detecting an actuator control signal.

6. A method according to claim 5, wherein it is determined that a substantial deceleration or acceleration or stop of the sledge occurs when the detected actuator control signal exceeds a predetermined decision threshold.

7. A method for initializing the radial position of an optical lens in a start-up phase of a disc drive apparatus, the method comprising the steps of:

- exerting a force on said sledge;
- detecting a substantial deceleration or stop of the sledge using a method according to any of the previous claims;
- stopping said force as soon as a substantial radial displacement of said platform with respect to said sledge is detected.

8. Disc drive apparatus, comprising:

- radially displaceable scan means, comprising:
  - a sledge radially displaceable with respect to an apparatus frame;
  - a platform radially displaceable with respect to said sledge;
- said apparatus further comprising:
  - sledge stop detection means for detecting that the moving sledge comes to a standstill;
  - said sledge stop detection means comprising radial displacement detection means for detecting a radial displacement of said platform with respect to said sledge.

9. Apparatus according to claim 8, further comprising:

- an electro-motive platform actuator for displacing said platform with respect to said sledge;
  - wherein said radial displacement detection means are designed to detect a back-EMF in said electro-motive platform actuator.

10. Apparatus according to claim 8 or 9, further comprising:

- an optical system for scanning a disc, the optical system defining an optical path of which at least a part is substantially fixed with respect to the sledge and comprising an optical element which is fixed with respect to the platform;
  - wherein said radial displacement detection means are designed to detect an optical read signal and to derive therefrom an X-displacement signal.

11. Apparatus according to any of claims 8-10, wherein said radial displacement detection means are designed to determine that a substantial deceleration or acceleration or stop of the sledge occurs when a detected radial displacement of said platform with respect to said sledge exceeds a predetermined decision threshold.

12. Apparatus according to any of claims 8-10, further comprising:

- a controllable platform actuator associated with said sledge and said platform for radially displacing said platform with respect to said sledge;
- a control unit generating a platform control signal for said platform actuator such as to counteract a radial displacement of said platform with respect to said sledge; wherein said radial displacement detection means are designed to detect said actuator control signal.

13. Apparatus according to claim 12, wherein said radial displacement detection means are designed to determine that a substantial deceleration or acceleration or stop of the sledge occurs when a detected actuator control signal exceeds a predetermined decision threshold.

14. Apparatus according to any of claims 8-13, further comprising:

- a controllable sledge actuator for moving the sledge radially with respect to said apparatus frame;
  - a control unit for controlling said sledge actuator;
- said control unit being responsive to said radial displacement detection means
- 5 to switch off said sledge actuator when said radial displacement detection means indicate that said moving sledge has come to a standstill.

15. Apparatus according to claim 14, wherein a displacement range of said sledge with respect to said apparatus frame is restricted by at least one end stop;

0 wherein said control unit is designed, in an initializing phase, to energize said sledge actuator such as to move said sledge towards said end stop;

and wherein said control unit switches off said actuator as soon as said sledge has reached said end stop.